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EXAMINER

ANWAH, OLISA

ART UNIT	PAPER NUMBER
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2645

DATE MAILED: 09/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/421,363

Applicant(s)

MEI ET AL.

Examiner

Olisa Anwah

Art Unit

2645

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2002.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26 is/are allowed.
- 6) ☒ Claim(s) 1-25 and 27-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claims 1, 12, 15-18 and 27-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Hanson U.S. Patent 6,016,336 (hereinafter Hanson).

Regarding claim 1, Hanson discloses an interactive voice response system (fig. 5). The interactive voice response (IVR) system includes a caller identification database 20 (column 2, lines 45-46). A caller calls the IVR server and the service controller 21 determines the most recent menu selection made by the caller. The most recent menu selection is retrieved and played for the caller (column 4, lines 9-17) (caller's profile retrieved and personalized IVR dialogue menu played).

Regarding claim 12, Hanson discloses inserting a personalized sub-menu into the IVR dialogue menu (column 5, lines 1-7). By updating the usage caller history, a sub-menu is inserted.

Regarding claim 15, Hanson further discloses the caller connects to the IVR system using a caller's phone 50 (column 3, lines 9-10 fig 3) (telephone call from user). A caller calls the IVR

Art Unit: 2645

server and the service controller 21 determines the most recent menu selection made by the caller. The most recent menu selection is retrieved and played for the caller (column 4, lines 9-17).

Regarding claim 16, Hanson discloses a storage unit for storing a caller profile (column 4, lines 62-64 fig 3). Hanson also discloses a service controller (retrieval unit) is used to determine the most recent menu selection made by the caller. The menu selection is then presented to the caller in the form of an audio message (column 4, lines 12-19).

Regarding claim 17, Hanson discloses the caller ID database 20 is queried to determine if the caller's ID is stored in the caller ID database (column 4, lines 9-12). If the incoming caller ID matches a caller ID in the caller ID database (caller's profile), the service controller determines the most recent menu selection (personalized dialogue menu) made by the caller (column 4, lines 12-14).

Regarding claims 18 and 27, Hanson teaches the caller is interfaced to the service controller (retrieval unit) through the PSTN via the switch module (column 4, lines 1-3). The invention is not limited to use with a PSTN, and may include any network for connecting a caller to an end point (column 3, lines 1-4).

Regarding claim 28, Hanson discloses the functions of the IVR system 10 and the switch and call distributor 30 could be incorporated into a suitably programmed component (column 3, lines 5-9) (signal bearing medium). To complete the steps of storing a caller profile and retrieving a caller's profile to construct a personalized IVR dialogue menu and playing out the personalized menu, as in the rejection of claim 1 above, it is obvious to one of ordinary skill in the art, the system must use programming to control the steps of claim 1.

Art Unit: 2645

Regarding claim 29, Hanson discloses in addition to personalizing a caller's menu based on the most recent selection, a caller's menu can be personalized based on a most recent call or an earlier call from the caller (col. 4, lines 15-25). Hanson also discloses the menu can also be personalized based on a time period criteria (col. 4, lines 28-33). Because Hanson discloses personalizing a menu (further truncating) based on a caller's earlier call or a time period criteria, Hanson discloses personalizing a menu based on a caller's defined parameter other than a most recent selection.

Claim 30 is rejected for the same reasons as claim 29.

Claim 31 is rejected for the same reasons as claim 29.

Claim 32 is rejected for the same reasons as claim 31.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2-9 and 21-23 are rejected under 35 U.S.C 103(a) as being anticipated by Hanson U.S. Patent 6,016,336 over Polcyn et al. U.S. Patent 6,061,443.

Regarding claim 2, Hanson as applied in claim 1 above differs from claim 2 in that Hanson does not teach tracking an access pattern of said caller. Polcyn et al. discloses a menu driven system that compiles a historical record of past usage of applications and transfers future incoming calls of callers directly to those application (column 1, lines 12-20 fig.1 ). The

Art Unit: 2645

interactive voice response server (IVR) contains a usage history database (column 2, lines 66-63). The caller's pattern of usage for each application is monitored (column 2, lines 66-67). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made, to modify the IVR system of Hanson to include tracking an access pattern of the caller, as taught by Polcyn et al., to provide a reduction in the average duration of incoming telephone calls without relying on the memory or abilities of callers (column 2, lines 31-33).

Regarding claim 3, Hanson as applied to claim 1 above differs from claim 3 in that Hanson does not teach specifying, by said caller, a personalized IVR menu. Polcyn et al. teaches the caller is given the option to connect to the usual services or the option to listen to a longer standard menu (column 6, lines 59-64). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made, to modify the IVR system of Hanson to include specifying, by said caller, a personalized IVR menu, to modify the IVR system of Hanson to include specifying, by said caller, a personalized IVR menu, as taught by Polcyn et al., to provide a reduction in the average duration of incoming telephone calls without relying on the memory or abilities of callers (column 2, lines 31-33).

Regarding claim 4, Hanson as applied to claim 1 above differs from claim 4 in that Hanson does not teach provide a tracking of IVR accessing patterns of the caller such that a shortcut is provided to a desired location based on the caller's IVR accessing patterns. Polcyn et al discloses a menu driven system that compiles a historical record of past usage of applications and transfers future incoming calls of callers directly to those application (column 1, lines 12-20 fig. 1). The interactive voice response server (IVR) contains a usage history database (column 2,

Art Unit: 2645

lines 62-63). The caller's pattern of usage for each application is monitored (column 2, lines 66-67). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made, to modify the IVR system of Hanson to include provide a tracking of IVR accessing patterns of said caller such that a shortcut is provided to a desired location based on said caller's IVR accessing patterns, as taught by Polcyn et al., to provide a reduction in the average duration of incoming telephone calls without relying on the memory abilities of callers (column 2, lines 31-33).

Claim 5 further differs from the above rejection of claim 4 in that Hanson and Polcyn do not teach said shortcut is based on a most-recently accessed IVR pattern. However, Hanson further teaches the service controller can determine the most recent menu selection made by the caller (column 4, lines 12-14). Therefore, it would have been obvious to one with ordinary skill in the art at time the invention was made, to further modify the IVR system of Hanson, as modified by Polcyn et al. above, to include said shortcut is based on a most-recently accessed IVR pattern, as taught by Hanson, to provide an IVR system to truncate or eliminate unnecessary menu layers (column 1, 45-46).

Regarding claim 6, the IVR system of Hanson as modified by the menu driven system of Polcyn et al, in the rejection of claim 4, does not teach said shortcut is based on a most-frequently accessed IVR pattern. Polcyn et al. further teaches a statistical engine determines which application a caller use most frequently. When the caller calls, the interference engine directs the IVR server to automatically access the customer's preferred IVR application (column 4, lines 34-44). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made, to have the IVR system of Hanson, as modified by Polcyn et al. in

Art Unit: 2645

the rejection for claim 4 above, and further modify by including said shortcut is based on a most-frequently accessed IVR pattern, as taught by Polcyn et al., to provide a reduction in the average duration of incoming telephone calls without relying on the memory or abilities of callers (column 2, lines 31-33).

Regarding claim 7, the IVR system of Hanson as modified by the menu driven system of Polcyn et al., in the rejection of claim 3, does not teach wherein a specification of said personalized IVR menu is performed over a phone. Polcyn et al. further teaches an automated telephone system 100 coupled to telephone lines of the public telephone system (column 3, lines 42-49 fig. 1). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made, to further modify the IVR system of Hanson, as modified by Polcyn et al. above, to include wherein a specification of said personalized IVR menu is performed over a phone, as taught by Polcyn et al., to provide a reduction in the average duration of incoming telephone calls without relying on the memory or abilities of callers (column 2, lines 31-33).

Regarding claim 8, the IVR system of Hanson as modified by the menu driven system of Polcyn et al., in the rejection of claim 3, does not teach wherein a specification of said personalized IVR menu is performed over a network. Hanson further teaches the invention can be used with any network for connecting the caller to an endpoint including an intranet, and the internet (column 3, lines 1-4). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made, to further modify the IVR system of Hanson, as modified by Polcyn et al. above, to include wherein a specification of said personalized IVR



Art Unit: 2645

menu is performed over a network, as taught by Hanson, to provide an IVR system to truncate or eliminate unnecessary menu layers (column 1, lines 45-46).

Regarding claim 9, as taught in the rejection for claim 8 above, Hanson teaches the invention can be used with any network for connecting the caller to an endpoint including an intranet, and the internet (column 3, lines 1-4).

Regarding claim 21, Hanson does not teach a dialogue logging and analysis module for recording a dialogue between the IVR system and said caller, and logging input sequences from said caller of the IVR system while said caller if the IVR system while the caller conducts said dialogue with said IVR system. Polcyn et al. teaches an IVR server which captures and decodes caller ID information associated with each incoming call, identifies the caller, based on caller ID information, and retrieves usage history information (access patterns) (recording dialogue between IVR system and caller and logging input sequences) related to the caller (column 2, lines 50-56). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made, to modify the IVR system of Hanson to include a dialogue logging and analysis module for recording a dialogue between the IVR system and said caller, and logging input sequences from said caller of the IVR system while said caller if the IVR system while the caller conducts said dialogue with said IVR system, as taught by Polcyn et al., to provide a reduction in the average duration of incoming telephone calls without relying on the memory or abilities of callers (column 2, lines 31-33).

Regarding claim 22, the IVR system of Hanson as modified by the menu driven system of Polcyn et al., in the rejection of claim 21, does not teach the analyzed access pattern s are for providing a shortcut for personalized access to a least one of a most frequently accessed

Art Unit: 2645

information of said caller and a most recently accessed dialogue path of said caller. The present invention shortcuts the long introductory menu messages by branching directly to the caller's preferred IVR application based on the caller's past usage (column 6, lines 41-44) (most frequently accessed information). Polcyn et al. also gives an example of providing a shortcut for a personalized access to a most recently accessed dialogue path (column 8, lines 5-16). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made, to further modify the IVR system of Hanson, as modified by Polcyn et al. above, to include the analyzed access patterns are for providing a shortcut for personalized access to at least one of a most frequently accessed information of said caller and a most recently accessed dialogue path of said caller, as taught by Polcyn et al., to provide a reduction in the average duration of incoming telephone calls without relying on the memory or abilities of callers (column 2, lines 31-33).

Regarding claim 23, the IVR system of Hanson, as modified by the menu driven system of Polcyn et al., in the rejection of claim 21, and further modified by the menu driven system of Polcyn et al., in the rejection of claim 22, does not teach does not teach based on said input sequences logged, said dialogue logging and analysis module provides at least one of personalized direct access automatically when said caller next calls the IVR system and a suggestion of such patterns to said caller for creating said personalized menu. Polcyn et al. teaches a caller is given a shortcut choice by pressing '1' or a long sequences of standard introductory messages (column 6, lines 59-64). Therefore, it would have been obvious to one with ordinary skill in the art to modify the IVR system of Hanson, as modified by Polcyn et al. above, and further modified by Polcyn et al. above, to include based on said input sequences

Art Unit: 2645

logged, said dialogue logging and analysis module provides at least one of personalized direct access automatically when said caller next calls the IVR system and a suggestion of such access pattern to the caller for creating said personalized menu, as taught by Polycn et al., to provide a reduction in the average duration of incoming telephone calls without relying on the memory of abilities of callers (column 2, lines 31-33).

3. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being anticipated by Hanson U.S. Patent 6,016,336 in view of Wu U.S. Patent 6,173,0424 B1.

Regarding claim 10, Hanson as applied in claim 1 does not teach displaying to said caller said IVR menu to reduce a number of key sequences during interaction. Wu disclose a system for providing personal computer access to an IVR system (column 2, lines 48-53). The IVR access system queries the user (caller) by the presentation of a user display. Choices for a destination are given to the user (column 44, lines 50-55). The display choices are shortcuts to destination in an IVR system (column 4, lines 59-66) (reduction of key sequences). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made, to modify the IVR system of Hanson to include displaying to said caller said IVR menu to reduce a number of key sequences during interaction, as taught by Wu, so service providers could server both callers and PC users using an existing voice response system.

Regarding claim 11, the IVR system of Hanson as modified by the IVR access system of Wu, in the rejection of claim 10, does not teach performing a tree based collapsing of said personalized IVR dialogue menu. Hanson further teaches the caller is presented with a hierarchical menu (tree based collapsing) of call routing options (column 3, lines 47-48 fig 2). Therefore, it would have been obvious to one with ordinary skill in the art at the time the

Art Unit: 2645

invention was made, to further modify the IVR system of Hanson as modified by Wu above, to include performing a tree based collapsing of said personalized IVR dialogue menu, as taught by Hanson, to provide an IVR system to truncate or eliminate unnecessary menu layers (column 1, lines 45-46).

Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being anticipated by Hanson U.S. Patent 6,016,336 in view of Csaszar et al. U.S. Patent 5,970,124.

Regarding claim 13, Hanson as applied in claim 1 above does not teach inserting an advertisement into said caller's personalized IVR dialogue menu, based on the caller's IVR past accessing patterns, during the caller's navigation of said personalized IVR dialogue menu. Csaszar et al. discloses a directed advertisement system that can be used to offset the costs associated with providing an IVR system (column 2, lines 8-14 fig 1 & fig. 4). Csaszar discloses a student grade retrieval by phone example. When a student calls the IVR system to retrieve grades, the student is prompted for an ID number. A list of advertising messages is played to the student. An indication is returned to the server whether the student responded to any offer presented by the IVR (column 8, lines 55-67, column 9, lines 1-9). The server uses the information returned from the IVR to make sure the student does not receive the same ad again (accessing patterns) when calling again (column 9, lines 10-13). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made, to modify the IVR system of Hanson to include inserting an advertisement into said caller's personalized IVR dialogue menu, based on the caller's IVR past accessing patterns, during said caller's navigation of said personalized IVR dialogue menu, as taught by Csaszar et al., to provide the ability of advertisers and marketers to better direct advertisements to customers who are more interested in

Art Unit: 2645

to product or service being sold as a great value to advertisers and marketers (column 3, lines 44-47).

Regarding claim 14, in the rejection of claim 13 above, the directed advertisement system of Csaszar et al. teaches a grade retrieval example with advertisement insertion. All advertisement insertion is based on the student grade menu (contents of menu – grades retrieval) that that student has accessed (column 8, lines 55-67, column 9, lines 1-22).

Claim 19 is rejected under 35 U.S.C 103(a) as being anticipated by Hanson U.S. Patent 6,016,336 over Wolf Patent 5,737,393.

Regarding claim 19, the IVR system of Hanson in the rejection of claim 16, does not teach said retrieval unit includes a telephone interface module for selectively interfacing with said PSTN and for selectively receiving a predetermined tone and a voice input from said caller via the PSTN, said telephone interface module selectively transmitting at least one of synthesized and stored voice messages to said caller via the PSTN, wherein said personalized IVR dialogue menu is configurable by said caller through the PSTN via said telephone interface module. Wolf discloses an interactive voice mail/voice response system (column 1, line 61 fig1A & fig. 1B). The system is connected to a telephone line to provide standard telephone capabilities (column 3, lines 16-20). To one of ordinary skill in the art, a PSTN is a telephone network to which standard telephone capabilities are applied. When a caller calls the IVR system, the caller is prompted to choose from given options (column 5, lines 2-3). A prompt may be “Press 1 to leave a message for jean” (column 5, lines 44-45 fig. 2). By pressing “1” (receiving a predetermined tone), the caller can then leave a voice message (voice input). Text to speech synthesis techniques can be used to create audio prompts (column 4, lines 34-37). When a prompt is transmitted to the caller,

Art Unit: 2645

it can be a synthesized prompt (synthesized message). A caller can be prompted to retrieve voice messages from an assigned mailbox (voice message transmitted to caller) (column 6, line 42). By calling the IVR system and choosing an option, the caller is configuring the menu. All instructions for using the IVR system are stored in memory 14 and executed by the CPU 12 (column 3, lines 28-30 fig. 1A) (telephone interface module). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made, to modify the IVR system of Hanson to include said retrieval unit includes a telephone interface module for selectively interfacing with said PSTN and for selectively receiving a predetermined tone and a voice input from said caller via the PSTN, said telephone interface module selectively transmitting at least one of synthesized and stored voice messages to said caller via the PSTN, wherein said personalized IVR dialogue menu is configurable by said caller through the PSTN via said telephone interface module, as taught by Wolf, to provide an IVR system that that may be customized by a user to overcome or reduce disadvantages and limitations associated with prior methods and system (column 1, lines 60-64).

Claim 20 is rejected under 35 U.S.C 103(a) as being anticipated by Hanson U.S. Patent 6,016,336 over Juster U.S. Patent 5,724,406.

Regarding claim 20, in the rejection of claim 16 above, Hanson does not teach a dialog handler, coupled to receive an input from said caller, for modeling state transitions of said system, to provide an output, the output of said dialogue handler module determining a message to be returned to said caller, and an input of said dialog handler module being derived from a caller input via at least one of a predetermined tone and a voice message from said caller. Juster discloses an object oriented call processor that is used in messaging environments (column 1,

Art Unit: 2645

lines 60-63 fig. 1 & fig. 3 ). When a subscriber calls, a call processing service is identified. To provide the service, the call processor executes service logic in the services state table (column 2, lines 24-27). Each instruction is associated with a state in the service state table and is a service of events from that state. Execution of each logical state involves one primitive for transitioning to the next state table in the state table (column 2, lines 27-30 fig. 3). A call processing manager (dialogue handler) receives call request and executes call processing primitives to perform a requested call processing service (column 2, lines 54-57). The user develops a voice mail messaging application having the necessary voice prompts and DTMF responses by selecting appropriate call processing primitives that generate those prompts and tone responses (column 5 lines 23-25). In example 2, a caller is prompted to press "1" to renew a password (column 13, lines 8-14) (input of dialogue handler module being derived from a caller input via a predetermined tone). Once "1" is read by the call processing manager (dialogue handler), the caller can receive any message or prompt the user decides to develop into the voice mail messaging application. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made, to modify the IVR system of Hanson to include a dialog handler, coupled to receive an input from said caller, for modeling state transitions of said system, to provide an output, the output of said dialogue handler module determining a message to be returned to said caller, and an input of said dialogue handler module being derived from a caller input via at least one of a predetermined tone and a voice message from said caller, as taught by Juster, to provide a flexible call processor to be used in a wide range of multi-media messaging environments to provide any number/type of messaging service (column 1, lines 60-64).

Art Unit: 2645

Claim 24 and 25 is rejected under 35 U.C. 103(a) as being anticipated by Hanson U.S. Patent 6,016,336 over Wu U.S. Patent 6,173,042 B1.

Regarding claim 24, in the rejection of claim 16 above, Hanson does not teach said retrieval unit further includes a dialogue automatic playout module for allowing personalized access of information by said caller, wherein if said caller decides to use a personalized shortcut unique to said caller, controller sequences representing said shortcut are input to said dialogue automatic playout module. Wu discloses a system for providing personal computer access to an IVR system (column 2, lines 48-53). The IVR access system is located in a personal computer (PC) and comprises a script (control sequences) executing process (dialogue automatic playout module) that traverses the IVR system for the subscriber (column 4, lines 38-41). The user (caller) interface display provides the user with multiple choices, in menu form to identify one of a plurality of destinations that the user wishes to access (column 4, lines 52-55). The user (caller) inputs the script necessary to define the path required to traverse a selected IVR system to reach a desired destination (column 4, lines 58-61) (control sequences representing shortcut are input). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made, to modify the IVR system of Hanson to include said retrieval unit further includes a dialogue automatic playout module for allowing personalized access of information by said caller, wherein if said caller decides to use a personalized shortcut unique to said caller, control sequences representing said shortcut are input to said dialogue automatic playout module, as taught by Wu, so service providers could serve both callers and PC users using an existing voice response system.



Regarding claim 25, the IVR system of Hanson in the rejection of claim 16, further modified by the IVR access system of Wu, in the rejection of claim 24, does not teach said retrieval unit further includes a personalized menu processor module for construction said shortcut for the personalized menus specified by said caller, wherein specification is selectively performed over one of a telephone interaction and a world-wide network, and once specified by caller, the personalized menu is represented by one of a list of direct dialogue paths to desired information and a hierarchical dialogue menu. Wu further teaches a script executing process for processor P that traverses the IVR system IVR for the subscriber (column 4, lines 38-41 fig. 1). The user inputs the script necessary to define a path required to traverse a selected IVR system IVR to reach a desired destination (column 4, 59-61) (shortcut constructed for personalized menu specified by the user (caller)). The user displays provides the user with multiple shortcut destination choices in menu form (column 4, lines 50-55) (personalized menu represented by a list of direct dialogue paths to desired information). The user then selects a destination (specification selectively performed over a telephone interaction). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made, to further modify the IVR system of Hanson, as modified by Wu above, to include said retrieval unit further includes a personalized menu processor module for constructing said shortcut for the personalized menus specified by said caller, wherein specification is selectively performed over one of a telephone interaction and a world-wide network, and once specified by caller, the personalized menu is represented by one of a list of direct dialogue paths to desired information and a hierarchical dialogue menu, as taught by Wu, so service providers could serve both callers and PC users using an existing voice response system.

***Response to Arguments***

4. Applicant's arguments filed on 7/10/02 have been fully considered by they are not deemed to be persuasive.

Applicant argues that Hanson does not teach or suggest the general concept of constructing a personalized menu. However Hanson discloses constructing a menu which is personalized based on the most recent menu selection made by the caller.

Applicant argues Hanson does not disclose inserting a personalized sub-menu into the personalized IVR dialogue menu. However Hanson teaches inserting a message asking the user to decide whether or not to update the caller's usage history or to retain the previous selection. This inserted message reads on the claimed personalized sub-menu because it performs the same function of presenting added options to a user.

Regarding claims 15 and 17, applicant argues the timing of retrieving is not taught or suggested in Hanson. However applicant does not claim the timing of retrieving in the claims. Applicant claims the retrieving is performed upon said system receiving a telephone call from the user and Hanson discloses a caller calls the IVR server and the service controller determines the most recent menu selection made by the caller. The most recent menu selection is retrieved and played for the caller. This reads on the claimed retrieving feature.

Regarding claim 16, applicant argues Hanson does not teach a retrieval unit for retrieving the caller's profile to construct a personalized IVR dialogue menu and play-out the personalized menu. However Hanson discloses retrieving caller information and playing a personalized menu to caller.

Art Unit: 2645

Regarding claim 2, Hanson applicant argues both Polcyn and Hanson address completely different problems. However Hanson discloses an interactive voice response system for playing menus. Polcyn discloses an interactive voice response system for playing menus. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the IVR system of Hanson to include tracking an access pattern of the caller as taught by Polcyn. This provides a reduction in the average duration of incoming telephone calls without relying on the memory or abilities of callers as explained by Polcyn. This combination results in the claimed features of claim 2.

Regarding claim 3, applicant argues Polcyn only allows the caller to go directly to the applications or to listen to the standard menu. However Hanson teaches retrieving the caller's profile to construct a personalized IVR dialogue menu and Polcyn teaches the caller is given the option to listen to connect to the usual services or the option to listen to a long standard menu. Therefore the combination of Hanson and Polcyn teaches claim 3.

Regarding claims 4, 5 and 6 applicant argues combining Hanson and Polcyn does not teach tracking the paths to applications and providing a shortcut based on the caller's IVR accessing patterns. However Polcyn teaches compiling a historical record of past usage of applications. The compiled historical record reads on the claimed tracking of access patterns. Polcyn also teaches transferring future incoming calls of callers directly to those applications based on the historical record compiled. This transferring feature based on historical data reads on the claimed feature of providing of a shortcut to a desired location based on caller's access patterns. Therefore combining Hanson and Polcyn teach claims 4, 5 and 6.

Art Unit: 2645

Regarding claim 7, applicant admits the personalized menu can be specified via a phone by combining Hanson and Polcyn, therefore the combination of Hanson and Polcyn teach the claimed limitation of claim 7.

The arguments of claim 8 are not deemed persuasive for the same reasons of the arguments of claim 7.

Regarding claim 21, applicant does not claim analyzing the paths to applicants. Applicant claims analyzing caller's access patterns and Polcyn's usage history information reads on the claimed access pattern. Therefore applicant's argument regarding claim 21 have been considered but deemed to be unpersuasive.

The arguments of claim 22 are not deemed persuasive for the same reasons of the arguments of claim 21.

Regarding claim 23, applicant argues Hanson combined with Polcyn teaches only the most recently used application will be provided as the direct access option. However Polcyn teaches the direct access option provided in the personalized menu can be based on usage history information (input sequences logged).

Applicant argues Wu fails to teach about a method of changing the IVR menu on the computer. However Hanson discloses changing the IVR menu and Wu discloses displaying to the caller the IVR menu. Therefore Hanson as modified by Wu teaches the claimed limitation of displaying to the caller the IVR menu.

Regarding claim 11, applicant argues the menus choices are not for callers, however applicant does not claim the menu options must be for callers.

Art Unit: 2645

Regarding claim 13, applicant argues Hanson as modified by Csaszar could not guarantee not to repeat any advertisement that has been played prior to the last. Applicant further argues the ad insertion point of the present invention can be in multiple places along the personalized menu. However applicant does not claim these features. Applicant only claims inserting an advertisement into the caller's personalized IVR dialogue menu and this limitation is taught by the combination of Hanson and Csaszar.

Regarding claim 14, applicant argues the grade menu of Csaszar is a standard menu not a personalized menu however Hanson's menu is a personalized menu.

Regarding claim 19, applicant argues the combination of Hanson and Wolf does not teach a configurable menu via the system for personalized IVR menu. However as clearly discussed above Hanson teaches a configurable menu via the system for personalized IVR menu. The menu is personalized because it is presented based on the most recent each caller's personal most recent access.

Regarding claim 20, applicant argues Juster does not teach the logic to reduce the key sequences to reach a destination of an IVR system. However in claim 20, applicant does not claim logic to reduce the key sequences to reach a destination of an IVR system. Therefore applicant's arguments are not deemed persuasive.

Regarding claim 24, applicant argues combining Hanson with Wu does not teach the concept of allowing personalized menus to be displayed on the computer. Hanson allows for personalized menus to be accessed and Wu allows for a menu to be displayed on a computer. Therefore the combination of Hanson and Wu teach claim 24.

Art Unit: 2645

Regarding claim 25, applicant argues that Hanson combined with Wu does not teach a collection of access patterns. However claim 25 does not claim a collection of access patterns. Therefore applicant's arguments are deemed unpersuasive.

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*Allowable Subject Matter*

5. Claim 26 is allowed.

*Conclusion*

6. **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olisa Anwah whose telephone number is 703-305-4814. The examiner can normally be reached on Monday to Friday from 8.30 AM to 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on 703-305-4895. The fax phone numbers for the

Art Unit: 2645

organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

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O.A.

Olisa Anwah  
Patent Examiner  
September 16, 2002

FAN TSANG  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

